

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 January 2005 (13.01.2005)

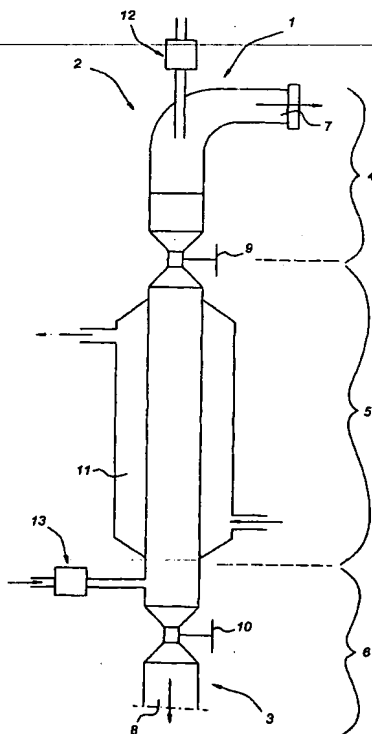
PCT

(10) International Publication Number  
**WO 2005/003757 A1**

- (51) International Patent Classification<sup>7</sup>: **G01N 33/00**, **G09B 23/28**
- (21) International Application Number: **PCT/NL2004/000286**
- (22) International Filing Date: **29 April 2004 (29.04.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:  
**03077083.8** **2 July 2003 (02.07.2003)** **EP**
- (71) Applicant (for all designated States except US): **QUEST INTERNATIONAL B.V. [NL/NL];** Huizerstraatweg 28, NL-1411 GP Naarden (NL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **DAVIDSON, Peter [GB/NL];** Patrijslaan 8, NL-1272 PX Huizen (NL).
- (74) Agent: **VAN WESTENBRUGGE, Andries et al.;** Nederlandsch Octrooibureau, Scheveningseweg 82, P.O. Box 29720, NL-2502 LS The Hague (NL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,**

*[Continued on next page]*

(54) Title: **ARTIFICIAL THROAT**



(57) Abstract: The present invention relates to an artificial throat for simulating aroma release comprising - a tube (1) having an inlet (2) and an outlet (3) and having an upper portion (4), a middle portion (5) and a lower portion (6); - a sample supply system (12) debouching at the upper portion of the tube; - an inlet closure (9) for closing and opening the inlet; - an outlet closure (10) for closing and opening the outlet; - a gas ventilation system (13) debouching at the lower portion of the tube for providing a gas flow, such as an air flow, through the tube. The invention also relates to an assembly for simulating and analyzing aroma release comprising an artificial throat and an analyzing apparatus, such as a mass spectrometer. Furthermore the invention relates to a method for simulating and analyzing aroma release by means of an artificial throat. Aroma release according to the invention means the release of volatile compounds from substances such as food and drinks, which compounds are transported by means of a gas flow.

**BEST AVAILABLE COPY**

**WO 2005/003757 A1**



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *with international search report*